

CLAIMS

1. An elongate composite pole, or the like, comprising:

a structural elongate member having an outer tubular member, defining an elongate closed area;

a strengthening material substantially filling said elongate closed area; and

an outer casing, comprised of a deformable composite material, deposited on the outside of said outer tubular member.

2. The elongate composite pole of claim 1, wherein said structural elongate member further comprises an inner web of strengthening members, defining a plurality of elongate closed columnar areas.

3. The elongate composite pole of claim 2, wherein said outer tubular member is cylindrical.

4. The elongate composite pole of claim 3, wherein said strengthening members are defined as radially extending ribs.

5. The elongate composite pole of claim 4, wherein said structural elongate member is comprised of two substantially concentric cylindrical members interconnected by, said radially extending fins.

6. The elongate composite pole of claim 5, wherein the volume within an inner one of said two substantially concentric cylindrical members is left unfilled for a wiring passageway.

7. The elongate composite pole of claim 6, wherein said strengthening material is concrete.

8. The elongate composite pole of claim 4, wherein said radially extending ribs of said structural elongate member are connected at their diametrical center, forming three substantially equal sectors.

9. The elongate composite pole of claim 8, wherein all of said sectors are filled with said strengthening material.

10. The elongate composite pole of claim 9, wherein said strengthening material is concrete.

11. The elongate composite pole of claim 1, wherein the outer casing is comprised of a composite material of 40%-60% by volume polyethylene and 60%-40% by volume ground rubber particles.

12. An elongate composite pole, or the like, comprising:

a structural elongate member having an outer tubular member, and an inner web of strengthening members defining a plurality of elongate closed columnar areas;

a strengthening material substantially filling at least some of said closed columnar areas; and

an outer casing deposited on the outside of said outer tubular member.

13. The elongate composite pole of claim 12, wherein said outer tubular member is cylindrical.

14. The elongate composite pole of claim 13, wherein said strengthening members are defined as radially extending ribs.

15. The elongate composite pole of claim 14, wherein said structural elongate member is comprised of two substantially concentric cylindrical members interconnected by, said radially extending fins.

16. The elongate composite pole of claim 15, wherein the volume within an inner one of said two substantially concentric cylindrical members is left unfilled for a wiring passageway.

17. The elongate composite pole of claim 16, wherein said strengthening material is concrete.

18. The elongate composite pole of claim 14, wherein said radially extending ribs of said structural elongate member are connected at their diametrical center, forming three substantially equal sectors.

19. The elongate composite pole of claim 18, wherein all of said sectors are filled with said strengthening material.

20. The elongate composite pole of claim 19, wherein said strengthening material is concrete.

21. The elongate composite pole of claim 12, wherein the outer casing is comprised of a deformable composite material.

22. The elongate composite pole of claim 21, wherein the outer casing is comprised of a composite material of 40%-60% by volume polyethylene and 60%-40% by volume ground rubber particles.

23. A method of forming an elongate composite pole, comprising the steps of:

a structural elongate member is provided having an outer tubular member defining an elongate closed area;

an outer casing is deposited on the outside of said outer tubular member, said outer casing comprised of a deformable composite material; and subsequently,

filling said elongate closed area with a strengthening material.

24. The method of claim 23, wherein said structural elongate member is formed with the process of pultrusion.

25. The method of claim 24, wherein said structural elongate member is formed from strengthening fibers and a thermo-set resin.

26. The method of claim 24, wherein said outer casing is co-extruded over said structural elongate member.